

SHORT REPORT

An isolated case of leprosy presenting in a migrant worker in Northern Ireland

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Leprosy was first recorded in 600 BC in India. Europe saw its first cases in the fourteenth century. The worldwide incidence is falling, but the disease can still present in the most unexpected places: this is a report of the first case of leprosy presenting to an emergency department in Northern Ireland. It is important for physicians in both community and hospital medicine to have a high index of suspicion for leprosy in patients with chronic skin conditions who were born outside the UK or other developed countries.

A 27 year old man, JG, was born in East Timor, and had been resident in Northern Ireland for the previous three years. He had been employed by the same company in this time and was presently working as a welder.

CASE REPORT

History

JG presented to the emergency department (ED) with a three month history of skin rash. He has previously attended his general practitioner and the ED with the same problem. He had been commenced on chlorphenamine for a presumptive diagnosis of urticaria. However, he felt that the rash was becoming more pronounced and was spreading. The patient was previously healthy, systemically well, and on no medicines except chlorphenamine. He had no known contact with other people similarly affected, in East Timor or Northern Ireland. He was not diabetic, had no risk factors for human immunodeficiency virus infection and no noteworthy history of family illnesses.

Examination

On examination, he had numerous raised, erythematous plaques on his face, eyelids, ears, arms and hands (figs 1–3), including the palmar aspects. The plaques were non-tender and had normal sensation. He had no lymphadenopathy. Examination was otherwise unremarkable.

Investigation

Routine haematological and biochemical investigations were within normal range. The chest x ray was unremarkable. A review with the dermatology clinic was arranged for the following day, when a provisional diagnosis of lupus was made. Double punch biopsy was taken at this clinic.

Histopathological examination of the skin biopsy showed a pan-dermal, peri-neurovascular lympho-histiocytic infiltrate with a granuloma fraction of about 40%. The histiocytes were arranged focally in small non-necrotic granulomas. The nerves had a mild endoneuritis and marked perineural cuffing of inflammatory cells. Multiple acid and alcohol fast bacilli were seen within the inflammatory cell infiltrate, bacterial index of 4 (that is, between 10 and 100 per oil

emersion high power field). S100 staining showed nerve erosion. HLA-DR staining showed no epidermal positivity.

Diagnosis

The diagnosis of multibacillary borderline lepromatous leprosy was made.

Management

The patient was commenced on the recommended World Health Organization (WHO) multidrug treatment (MDT) regimen for multibacillary leprosy: rifampicin 600 mg monthly, dapsone 100 mg daily, clofazimine 50 mg daily, and clofazimine 300 mg monthly. He has noticed slight reddish discoloration of his urine because of rifampicin. He has had no lepra reactions and is currently under review by the dermatologists.

DISCUSSION

The WHO announced a strategic plan for the leprosy elimination in 2000–05.¹ The aim was to eliminate leprosy as a public health problem, defined as reduction of prevalence to fewer than 1 case per 10 000 population nationally. The WHO *Global Strategy for Further Reducing the Leprosy Burden and Sustaining Leprosy Control Activities 2006–2010* has extended this programme.²

The global registered prevalence of leprosy was 286 063 cases at the beginning of 2005, maintaining the decrease noted in the previous two years. Southeast Asia accounts for most of the leprosy cases worldwide, and East Timor is endemic for leprosy. A leprosy control programme was established in East Timor in September 2003.

In the UK, there are variations in the list of notifiable diseases issued by the health protection agencies for each home country. Leprosy has been a notifiable disease in England and Wales since 1951, but not in Scotland or Northern Ireland. The incidence of leprosy in the UK is very

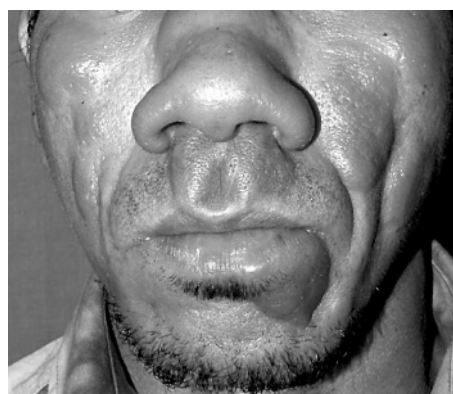


Figure 1 Erythematous plaques on the face. Informed consent was obtained for publication of this figure.



Figure 2 Erythematous plaques on the arms and hands. Informed consent was obtained for publication of this figure.

low: between 1946 and 2003, 50 cases were seen in the Liverpool School of Tropical Medicine.³ The Communicable Disease Surveillance Centre in Northern Ireland is responsible for collecting laboratory reports of *Mycobacterium leprae*. Its historic records date from 1992, and there are no reports of leprosy (personal communication with Communicable Disease Surveillance Centre Northern Ireland (Dr Brian Smyth), 2006). We believe this is the first reported case of leprosy in Northern Ireland.

Although it is hoped that the WHO aim of eradication of leprosy will be achieved, surely the inclusion of leprosy as a notifiable disease should be considered in all countries given the increase in global travel for both leisure and economic reasons. As shown by our experience and that of others, leprosy is rare in developed countries, but its importation must be acknowledged. It is important for physicians in both community and hospital medicine to have a high index of suspicion for leprosy in patients with chronic skin conditions who were born outside the UK or other developed countries.⁴⁻⁶



Figure 3 Close-up view of erythematous plaques on the hand. Informed consent was obtained for publication of this figure.

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Informed consent was obtained for publication of the person's details in this report and figs 1-3.

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